

Semiconductor device e.g. ball grid array package

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Novelty: The semiconductor device (8) has a semiconductor chip (10) mounted and electrically connected to a wiring board (12). A polar zone (14) is distributed by the wiring board. Bump electrodes (16) for external connection are distributed by the polar zone. A groove (20) is formed on each bump electrode.

Detailed Description: INDEPENDENT CLAIMS are also included for the following:

- (a) the semiconductor device manufacture;
- (b) and the mounting procedure of the semiconductor device.

Use: None given.

Advantage: Suppresses generation of void when manufacturing and mounting semiconductor device.

Description of Drawing(s): The figure is a sectional view showing the structure of the semiconductor device.

Semiconductor device 8

Semiconductor chip 10

Wiring board 12

Polar zone 14

Bump electrodes 16

Groove 20

(8pp Dwg.No.1/7)

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